STATE OF MAINE PUBLIC UTILITIES COMMISSION

Docket No. 2000-435

November 14, 2000

BANGOR HYDRO-ELECTRIC COMPANY Proposed Tariff for Space Heating Rate

ORDER

WELCH, Chairman; NUGENT and DIAMOND, Commissioners

I. SUMMARY

In this Order we approve the requests of Bangor Hydro-Electric Company (BHE or Company) to establish a "non-AMP" space-heat rate and for the issuance of an accounting order which would allow the Company to defer the difference between the amounts anticipated to be collected under such a rate and the revenue imputed to the Company in its recently completed rate case under the Company's current "AMP" space-heat program. We find that BHE should provide its space heating customers with a special T&D rate not to exceed 5.4¢/kWh and that the non-heating/heating rate break-point be set at 700 kWh for residential customers and 1200 kWh for non-separately metered commercial customers. As part of this Order, we also deny the Office of the Public Advocate's (OPA) request that we prohibit the Company from continuing to provide a discount to space-heat customers since the discount constitutes economic price discrimination.

II. PROCEDURAL HISTORY

See Appendix A.

III. BACKGROUND

The genesis of both BHE's current heat rate and the Commission's treatment of the lost revenues associated with the Company's heat rate discounts goes back to August 16, 1993 when BHE filed proposed schedules to provide discounted residential space heating service and electric thermal storage service rates. The Commission authorized BHE to offer a discounted rate for non-TOU space-heat rate customers of not less than 9 cents per kWh for usage over 600 kWh. Bangor Hydro-Electric Company, Proposed Schedule to Provide for Residential Space Heating Rate and Residential Electric Thermal Storage Service Rate, Docket No. 93-205, Order Permitting Short-Term Space Heat Rate (Nov. 29, 1993). In its Order approving the discounted rate, the Commission noted:

Bangor Hydro has stated that it will bear the risk of loss from these rates. In its initial filing, the Company stated "it will not seek an adjustment in its ongoing base rate proceeding to collect these revenues." At the same time, the Company states that ratepayers will at least potentially enjoy the benefits of any revenue increases. To ensure that the Company in fact bears the risk of loss, and that losses are not "flowed through" to ratepayers through the fuel cost adjustment, any tariff which BHE files in response to this Order shall maintain the level of revenues applied to fuel in accordance with the Company's currently approved revenue accounting procedures.

Id. at 8.

On March 22, 1995, BHE submitted a request for approval of a Residential Space Heating Price (RSHP) discount rate pursuant to the pricing flexibility provisions of the Alternative Marketing Plan or "AMP" approved by the Commission in *Public Utilities Commission, Investigation of Pricing Flexibility for Bangor Hydro-Electric Company,* Docket No. 94-125 (Feb. 14, 1995). To qualify under the AMP, the discount rate was required to meet the "revenue test" which compared the present value of utility net revenues with and without the discount program. The Company calculated the revenue it would receive without the discount using tariffed rates and a 4% per year rate of decline in electric heating sales. This assumption was developed by the Company based on load study research of its electric space heating customers from 1988 through 1992. During that time, heating sales declined by 21%, an annual drop of 4.88%.

The Company also assumed in its revenue analysis that sales to electric space-heat customers under its RSHP would grow by 18%. Included in this overall sales growth number was an assumption that the Company would be able to increase penetration of electric heat in the new home market by 5% per year until it reached 50% in the tenth year of the program.

Based on these assumptions, the RSHP would have net losses through 1999, would have net gains in 2000, and earn a total net profit of \$7,676,232 through 2005. The Commission found that the Company's assumptions appeared very optimistic, although not impossible. The Commission concluded that it could not, with confidence, find that the RSHP passed the revenue test. Bangor Hydro-Electric Company, Proposed Schedule to Provide for Residential Space Heating Price (94-125 AMP), Docket No. 95-701, Order Conditionally Approving Residential Space Heating Price at 4 (July 21, 1995).

Notwithstanding its failure to meet the revenue test, the Commission approved the Company's RSHP program. In granting its approval, the Commission stated:

In adopting pricing flexibility programs for Maine's electric utilities we are attempting to allow them to conduct their business more as if they were fully competitive enterprises. At the same time, we will not abandon our traditional responsibility to protect ratepayers from unnecessarily high costs and other risks. Our view is that – where consistent with this responsibility and with statute – we will allow utilities considerable discretion to market competitively, relying on their own judgment. Also, to the extent possible, utilities

should experience the discipline of the market first hand. Our role is not to protect utilities from themselves. It is to protect ratepayers.

Id. at 4. To address the Commission's concerns the following four conditions of approval were imposed:

- 1) Financial risks were shifted from ratepayers to shareholders through a revenue imputation mechanism based on the Company's assumed 4% annual rate of decline in electric heating sales;
- 2) Informational and marketing materials were to be submitted (after the fact) for Commission review;
- 3) A no-interest loan program would to be available under certain circumstances to new installation customers who chose to leave electric space-heat; and
- 4) The program would expire on October 1, 1998 unless the Company filed for reapproval and the Commission granted it.¹

Id. at 5-6.

The Company filed for reapproval on June 16, 1998. Reapproval was granted by the Commission on conditions similar to those imposed in Docket No. 95-701 and pending the outcome of the Commission's investigation of BHE's stranded costs, T&D revenue requirements and rate design in Docket No. 97-596. *Bangor Hydro-Electric Company, Request for Extension of Space Heating Prices*, Docket No. 98-465, Order Approving Space Heating Price and Commercial Space Heating Price (Sept. 16, 1998).

As part of its direct case in Docket No. 97-596, the Company proposed a rate-year space-heat revenue adjustment of \$390,000. The Advisory Staff, in its Bench Analysis, identified the following concerns with the Company's analysis: the Company's support for the assumption that, without the discount programs, space-heat sales would have continued to decline beyond September 30, 1998 at a rate of 4% per year; the Company's assumption that, absent the discount, space-heat load would have been served at 9¢/kWh rather than the retail rate; the Company's exclusion of the commercial space-heat program from the revenue adjustment; the Company's assumption that, absent the discount, the non-space-heat sales to space-heating customers would have remained at the 1993 level, and the presence of inconsistencies in the data supplied by the Company. The Advisory Staff asserted that the adjustment could be as high as \$1.5 million.

¹On November 25, 1995, in a companion case, Docket No. 95-707, the Commission approved a space heating program for BHE's commercial customers on conditions similar to the residential program with the exception that the Company was not required to provide no-interest loans to commercial customers with newly installed electric space heat.

In its surrebuttal filing, the Company revised its proposed adjustment to \$579,000. As part of this filing, the Company provided a regression analysis. This analysis modified the assumption of a 4% rate of decline for sales absent the program. Instead of the 4% decline, the regression predicted that absent the space-heat programs, roughly 1/3 of the 1993 level of space-heat sales would have eroded at a rate of between 8% and 10% per year, and the commercial space-heat load would have eroded at 12% per year.

In its Phase I decision in that case, the Commission authorized the Company to continue to offer a discounted space-heat rate and adopted a rate year space-heat revenue adjustment of approximately \$1.1 million.² In doing so, the Commission rejected both the Advisory Staff's suggestion of a 0% rate of decline for the years after 1998 and the Company's revised rates of decline based on its surrebuttal regression submission and continued to use the 4% rate of decline developed by the Company in Docket No. 95-701. The Commission stated that assuming the program continues, BHE could request that we open an investigation to consider what rate of decline should be used for future ratemaking. *Public Utilities Commission, Investigation of Stranded Cost Recovery Transmission and Distribution Utility Revenue Requirements and Rate Design of Bangor Hydro-Electric Company,* Docket No. 97-596, Order at 23, 25 and 28 (Nov. 24, 1999).

On December 1, 1999, BHE filed a Motion to Reconsider the Commission's decision on the space-heat rate adjustment. Specifically, the Company asked that the Commission "reconsider its decision to adopt a specific formula for this adjustment" and that it "permit the parties to establish a revised revenue delta adjustment and/or rate for its residential and commercial space-heat customers as part of Phase II of this proceeding."

The Commission rejected the Company's arguments, holding that it considered the issue of ratepayer protection when it initially approved the program. The Commission reiterated that BHE could file a case in the future to demonstrate that the assumed 4% rate of decline should be altered and stated that if such a change in assumptions was made, the Commission would consider the appropriateness of altering rates or deferring the rate impact until the next rate change. Docket No. 97-596, Order Denying Motion for Reconsideration at 3.

On June 30, 2000, the Company filed its proposal in this case requesting that the electric space-heat rate be set at 3¢ per kWh, that the revenue imputed for electric space-heat sales in Docket No. 97-596 be removed and that the Commission issue an accounting order authorizing deferral of the difference between the revenue imputed and the revenue to be received under the new rate.

²This number was later finalized at \$1.2 million in Phase II of the case.

IV. POSITIONS OF THE PARTIES

A. BHE

The Company's primary proposal in this case was presented through the pre-filed testimony of John Weber and Erin O'Neill (Weber/O'Neill). In their testimony Weber/O'Neill recommended that the space-heat rate be eliminated as an AMP rate and that the tail-block rate for electric space-heat be increased from 2.0¢ per kWh to 3.0¢ per kWh. For commercial customers Weber/O'Neill recommended that the tail-block rate for commercial customers without separate meters be increased from 2¢ per kWh to 3¢ per kWh and that the rate for customers with separate meters be lowered from 3.4¢ to 3.0¢ per kWh, thus making the rate for all electric heat commercial customers the same whether they have a separate meter or not.

Weber/O'Neill testified that the marginal cost of T&D service for electric heat customers was close to zero. This conclusion was based on the fact that the BHE winter peak and summer peak were nearly identical. However, since the capability of the transmission and distribution system is approximately 25% higher in the winter due to lower thermal stress experienced during colder months, there was essentially no marginal cost associated with the additional load consumed by electric space-heat customers.

Weber/O'Neill testified that the goal of the discount rate should be to maximize contribution. Since increases in price will result in decreased demand, the optimal rate is the point where increased revenues equal the contributions lost from defecting customers. The witnesses testified that finding the optimal rate, however, was nearly impossible since elasticity for these customers is not known and may never be known. Rather than rely on elasticity studies to calculate the rate, the witnesses did a series of life-cycle cost analyses comparing electricity with competitive fuels. The witnesses compared the cost of heating with electricity with converting to and heating with oil for high use customers and with converting to and heating with kerosene for low use customers. Assuming oil prices of \$1.28 per gallon and discount rates of 12% and 18%, electricity was competitive with oil at an all-in rate of 7.3¢ to 10.4¢, depending on the amount of heat required. For low demand customers, depending on the level of usage and the discount rate assumed, these analyses revealed a range of all-in rates of 7.7¢ to 11.7¢. These analyses suggested that an increase in the all-in space-heat rate to 7.5¢ to 10.5¢ was possible. This corresponded to an elasticity of -1.7 to -2.5, which the witnesses believed was consistent with their survey of electric and gas elasticity studies which they found to be between -1.0 to -3.0.

Weber/O'Neill did similar analyses for commercial electric space-heat customers. Given these customers' more savvy business practices, and thus lower discount rates, the witnesses concluded that the all-in rates required to retain commercial customers were slightly lower and in the range of 7.4¢ to 9.0¢ per kWh.

To preserve options for later price changes, the witnesses recommended that the price should initially be set at the lower end of the spectrum, or $3.0 \, \text{¢}$ per kWh for T&D service based on the then current standard offer rate of $4.5 \, \text{¢}$ per kWh.

Weber/O'Neill also testified that setting the rate at the lower end of the spectrum would be more equitable to existing space-heat customers who had, until recently, been paying 5¢ per kWh for bundled electric service.

Weber/O'Neill testified that an alternative to increasing the tail-block rate would be to increase the head-block/tail-block break point to a point where the same amount of revenue was produced. During the discovery process, the Company elaborated on this proposal and estimated that an increase in the residential break point from 600 kWh to 700 kWh would have the same revenue impact as raising the tail-block rate by 3¢. For non-separately metered commercial customers, raising the tail-block breakpoint by 300 kWh would have the same impact as the proposed increase in the tail-block rate.

B. The OPA

Dr. Ronald Norton filed testimony on behalf of the OPA in response to the Company's proposal. Dr. Norton stated that he disagreed with the Company's position on several levels. First, Dr. Norton believed that there were many qualitative factors that customers relied on in heating source selections which were not considered by the Company. Specifically, the Company failed to account for the stable price and reliable supply of electricity. Dr. Norton noted that the \$1.28 per gallon figure used by the Company in its life cycle analysis was too low given likely oil price spikes.

Second, Dr. Norton argued that caution should be exercised in assigning a zero marginal cost to electric space-heat. He reasoned that the electric space-heat program could be so successful so as to erode the 25% differential between summer and winter T&D capacity.

Finally, Dr. Norton testified that by treating space-heat customers differently from other winter peaking customers the Company was engaging in economic price discrimination since these other customers have similar cost characteristics to space heating customers.

C. Rebuttal/Surrebuttal

In response to Dr. Norton's testimony that the additional winter capacity could be eroded by additional space-heat use, Ms. O'Neill stated that the currently available cushion of 25% translates into approximately 70 megawatts of additional capacity, which is roughly equivalent to the installed capacity of Bangor Hydro's current (6,000) electric space-heat customers. According to Ms. O'Neill, the program has added 100 new customers per year over the past several years. At that rate, it would take 60 years to erase the cushion.

Ms. O'Neill also countered Dr. Norton's point on discrimination by stating that while the rate could be considered discriminatory, it was, like self-generation deferral rates, a benign form of discrimination since the rate increased the contribution the Company received toward its fixed costs.

Carroll Lee, Senior Vice-President and Chief Operating Officer for BHE, also provided oral rebuttal testimony at the hearing to Dr. Norton's claim of price discrimination. Mr. Lee testified that the cost characteristics of a customer are only one of the inputs in determining what rate a customer should be charged. The other key component is whether the customer has alternatives to the use of electricity at the tariffed rate. Mr. Lee noted that the Commission has frequently approved special rates for customers based on the customers' alternatives.

In his oral surrebuttal, Dr. Norton testified that he believed the 3¢ to 6¢ range identified by the Company witnesses was too low. In support of this position, Dr. Norton first pointed to the recent run up in oil prices to \$1.44 per gallon, which Dr. Norton believed would probably spike to \$2.00 per gallon by mid-winter. Second, Dr. Norton testified that the elasticity implicit in the Company's recommendation of -1.7 to -2.5 did not accurately reflect the range of elasticity studies identified in the academic literature.

V. FINDINGS OF FACT AND CONCLUSIONS OF LAW

A. <u>General Legal Standards</u>

As a general principle, all customer classes and all customers within classes should be treated equally. Bangor Hydro-Electric Company, Proposed Cogeneration Deferral Rate for Lincoln Pulp and Paper, Docket No. 89-411 (Oct. 9, 1990). There is no question that by developing a special rate for electric heat customers the Company is treating space-heat customers differently from other customers in the class even though other customers may have similar cost characteristics to the electric space-heat customers. The fact that BHE's special heat rate may be discriminatory does not end the analysis, however. We have, on numerous occasions, approved special rate contracts for individual customers based on the particular customer's circumstances. The real question before us is whether the discrimination here is undue. 35-A M.R.S.A. § 702.

Where there are substantial benefits to other ratepayers as a result of a special discount rate, we have concluded that the discrimination is not undue or unreasonable. *Bangor Hydro-Electric Company, Proposed Special Rate Contract for LCP Chemicals,* Docket No. 91-161 (Jan. 24, 1992). In deciding whether substantial benefits exist, the following 3-part analysis must be satisfied:

- 1) Is the rate in fact necessary?
- 2) If so, is the rate above the marginal cost of providing the service?
- 3) Is the contribution above marginal costs substantial and is the contribution maximized?

Public Utilities Commission, Investigation of Airco Industrial Gases Request for Interruptible Load Retention Service Rate with Central Maine Power Company, Docket No. 92-331, Order (Part II) at 10 and 11 (Mar. 25, 1994) (hereinafter "Airco Industrial Gases").

B. Is an Electric Space-Heat Rate Necessary?

Company witnesses Weber/O'Neill have testified that unlike other uses for electricity, electricity used for space heating competes against other fuels. To the extent that the price for electricity for space-heat rises compared to the price of other fuel alternatives, customers will switch to the less costly alternatives. Weber/O'Neill identified four alternatives to electric heat: wood; oil; kerosene; and propane. Based on their life cycle analysis, the witnesses identified a range of between 7.5¢ and 10.5¢ as the optimal all-in electric space-heat rate which translated into T&D rates of 3.0¢ to 6.0¢ based upon BHE's standard offer price of 4.5¢ in effect at the time the authors submitted their pre-filed testimony.

The accuracy of the range of rates needed to meet competitive alternatives identified by Weber/O'Neill depends, of course, on the accuracy of the assumptions used in their calculations. The OPA's witness, Dr. Norton, has questioned the use of the \$1.28 per gallon price used by Weber/O'Neill in calculating the cost of converting to oil. While Dr. Norton is correct that the price of oil has risen over the past several months, and an updated analysis should reflect such a change, it is also true that the cost of generation has also risen recently, and on October 1, 2000 we increased BHE's standard offer price to 6.1¢ per kWh to reflect increased generation costs. It is thus possible, as Ms. O'Neill testified at the hearing, that these two changes offset each other in the life cycle cost analysis.

We believe the most subjective, and thus the most questionable, of the witnesses' assumptions is the discount rate to be used and applied to the capital investments required to convert to an alternative fuel source. For residential customers the witnesses assumed discount rates of 12% and 18% in calculating their range of a competitively necessary rate. While an 18%, or "credit card rate," would seem to make sense as a high-end discount rate, it has been our experience in dealing with issues such as DSM installation that residential customer discount rates often do not make economic sense. To the extent then that customer discount rates are actually higher than the assumed rates, the top end of the range of rates identified by the Company's witnesses would also go up.

Nonetheless, we find that the Company has identified competitive alternatives which are available to electric space-heat customers at prices below the all-in tariffed rate for electric service. We, therefore, find that the Company has satisfied the criterion that a special discount rate is necessary in this instance.

³Weber/O'Neill concluded that, even at the current space-heat rate, wood was cheaper than electricity. The witnesses also concluded that while kerosene heaters were slightly more expensive than propane heaters, the quality of the kerosene heat option was better, since kerosene heaters could be permanently installed and vented to the outside. Therefore, kerosene was seen as a more competitive option than propane.

⁴Company witness Weber seemed to acknowledge this fact at the Technical Conference on the Company's case. Tr. B-36.

C. <u>Do the Rates Proposed Exceed Marginal Costs?</u>

Regardless of the competitive necessity to offer a discounted rate, a rate should never be approved if it does not at least cover the marginal cost of providing the service. We are satisfied, based on the evidence presented, that even at the low end of the range of rates presented, the electric space-heat rate exceeds its marginal cost.

As explained by Company witnesses Weber/O'Neill, the Company's winter peak and summer peak loads are nearly identical. To accommodate summer thermal stress, an additional 25% capacity must be added to the T&D system. As a result, during the winter months there would be approximately 25% excess capacity. We do not find credible Dr. Norton's argument that this capacity could be absorbed by the success of the space-heat program or some other increase in sales. First, as a general matter, BHE's sales over recent years have been flat. Second, while BHE had assumed that it would add a significant amount of new electric space-heat load as a result of the space-heat rate, the record indicates that the Company has not been successful in this goal. In 1998, of 765 new residential customers, three installed electric heat. In 1999, seven out of 1374 new residential customers installed electric heat, and in the first six months of 2000, none of the 278 new residential customers installed electric heat. While these numbers may bring into question the elasticity assumptions regarding this rate, they do not provide any support for the position that the success of this program will wipe out the excess capacity of the T&D system during the winter months. We therefore find that the marginal cost for providing service to electric space-heat customers is, as the Company alleges, likely close to zero and thus exceeded by even the low end of the Company's proposed reasonable range of rates. Having satisfied ourselves that the marginal cost test has been met, we next turn to the issue of revenue contribution.

D. <u>Does the Proposed Rate Provide a Substantial and Maximum Contribution</u> to Fixed Costs?

When approving a special rate discount, we in effect modify our general principle that customers be treated equally. Thus, we have required that preferences given to a particular customer be minimized, or stated somewhat differently, that the contribution above marginal costs be maximized and that such a contribution in fact be substantial. Docket No. 92-331, *supra.* at 10 and 11 (Mar. 25, 1994).

In the case before us, the Company's witnesses Weber/O'Neill have testified that it is not possible in this case to determine an optimal space-heat rate or the rate at which contribution is maximized. The witnesses reached this conclusion for several reasons. First, there are no definitive elasticity studies on electric heat load. Second, the results of elasticity studies for electricity in general cover a fairly wide bandwidth ranging from -.4 to -4.5. Third, the witnesses, at this time, did not have good information about BHE's electric heat customer segments or their usage patterns. The witnesses noted in their pre-filed direct testimony that:

In order to determine the optimal rate, we need not only to estimate the elasticity of demand for each segment, but also to understand how many customers are in each segment and how much electricity they use. This information is needed because different customer segments may have different price sensitivities, and we already know they have different competitive alternatives. There is no reason to believe that an apartment dweller will have the same reaction to a change in price as someone living in a single family house.

As of this date, the Company has not collected the necessary customer segment usage data. The witnesses, therefore, recommended that over the next year the Company collect demographic information regarding the relative share of different customer segments and the usage pattern of each of these groups. Finally, the witnesses stated that uncertainty in fuel prices, including the cost of electricity supply, adds to the uncertainty of the analysis.

Given their inability to determine a maximum rate, the witnesses developed a range of reasonable all-in rates of 7.5¢ to 10.5¢ based on their life analyses. These rates corresponded to elasticity demand response rates of -1.7 to -2.5, which the witnesses found to be reasonable based on their surveys of the elasticity studies. To preserve the Commission's options while additional information is gathered, the witnesses recommended that the rate be set at the low end of the range or 3.0¢ per kWh for T&D service assuming a 4.5¢ price per kWh for standard offer service.⁵

We have noted, on previous occasions, that while in theory it is easy to state that a special discount should maximize contribution, in practice establishing the exact point at which revenue is maximized is an extremely difficult task. *Airco Industrial Gases*, Docket No. 92-331, *supra*. at 12. In this case that problem is greatly exacerbated by the fact that we are not just dealing with one customer as we were in *Airco Industrial Gases*, but rather a class made up of 6,000 customers who fall into many different market segments based on their differing levels of usage and availability of competitive alternatives. We thus agree with Weber/O'Neill that it is not possible to determine with certainty in this case a rate which maximizes revenue. Given the wide range of possible prices, one course of action would be to reject BHE's proposal to establish a non-AMP rate and retain the status quo. For the reasons set forth below, we do not believe that this would be in the interests of the Company's ratepayers.

Presently, BHE is providing its eligible space-heat customers a T&D rate of 2.0¢ as compared to the standard residential rate of 9.4¢. Under the current regulatory arrangement for calculating BHE's revenue requirements. BHE is assumed to receive revenue from space-heat customers based on tariffed rates times sales at the pre-discount volumes adjusted for a 4% annual rate of decline. The difference between

⁵In its Brief the Company continued to argue in favor of the 3.0¢ rate. Given our recent increase in the standard offer rate, it would seem that the Company has either abandoned or modified its position on option value.

this imputation and current revenues received from space-heat customers (the "revenue delta") is approximately \$1.2 million.

The Company has characterized this difference as a penalty and has stated that its shareholders can no longer bear this burden and continue the space-heat program under the current arrangement. Therefore, the Company states that unless this "penalty" is removed, it will have no alternative but to abandon the space-heat rate program and, thus, eliminate any discount for space-heat customers. While we disagree with the Company's assessment that the revenue imputation originally ordered in Docket No. 93-701, and continued by us in the Company's recently completed rate case, Docket No. 97-596, constitutes a penalty, given the Company's failure to meet the sales goals set at the time the program was instituted and the resulting level of the revenue delta, we find the Company's statements that it will eliminate the space-heat discount rates unless the imputation is removed to be credible.

If the space-heat discounts were eliminated, given the heating alternatives identified by the Company and discussed in Section IV.A., *infra.*, in the long run core customers would suffer as space-heat customers would eventually find alternative heat sources and revenue contribution would be lost. In addition, under such a scenario, electric space-heat customers would receive a dramatic price increase this winter (approximately 370% on their T&D rates and 90% on their total electric rates) while they searched for alternative heat sources. We do not believe that such a turn of events would be in the best interests of either the Company's core customers or its space-heat customers.

The life cycle analyses presented by Weber/O'Neill indicated a range of T&D rates for low demand residential customers of between 3.2¢ and 7.2¢; for high demand residential customers of between 2.8¢ and 5.9¢; and for commercial customers of between 2.9¢ and 4.5¢. As an alternative to raising the tailblock rate, the Company proposed raising the breakpoint for residential and non-separately metered commercial customers. Raising the breakpoint by 100 kWh/month for residential customers and by 300 kWh/month for non-separately metered commercial customers would have the same impact as raising the kWh charge by 1¢.

Based on the information presented to us, we find that a space heat rate of 5.4¢ should be set for all space-heat customers and that the breakpoint for residential customers should be increased by 100 kWh. This decision reflects our view that the discount rates relied on by the Company in its analyses tended to be too low and, therefore, the top end of the reasonable range of rates for all customers was likely higher. In addition, we note that on a national level, sales to residential customers have been increasing at a fairly significant pace due to the use of home computers and other electronic equipment and therefore the level of non-heating sales to residential customers has likely increased. The rates we order here are the maximum rates the Company can charge its space-heat customers. We will allow the Company, should it find it appropriate, the discretion to price below this level. For ratemaking purposes,

⁶We do not, as part of this Order, change the breakpoint for non-separately metered commercial customers.

however, we will assume that the Company receives the revenues from its space-heat customers at the maximum rate.

As part of our decision in the AMP case, we ordered that on at least an annual basis the Company must inform its customers who receive a special discount rate that the discount rate may be discontinued and also inform such customers of the rate implications should that occur. Docket No. 94-125, *supra.*, Order at 22. Based on the evidence produced in this proceeding, we find that BHE has failed to meet this obligation to its space-heat customers. We do not believe that this omission was either insubstantial or inconsequential.

As both the Company and the OPA witnesses noted during their testimonies, heating oil prices have risen over the past several months. We are thus faced with a situation where space-heat customers may, if the Company increases its prices to the maximum level allowed by us, see approximately a 150% increase in their T&D rates at the beginning of a heating season where alternative sources of heat are skyrocketing and where such customers were *not* informed that their discount rate could increase or be eliminated at the Company's discretion. We therefore strongly urge the Company to consider exercising its discretion to price below the 5.4¢/kWh cap and limit this heating season's increase to 2.0¢/kWh, so that the T&D rate for heating customers this season would be 4.0¢/kWh. Should BHE raise the heat rate above the 4¢ level this heating season, given the Company's failure to abide by the Commission's AMP notice requirements, we will initiate an investigation of BHE's communications with its space-heat customers to determine to what extent BHE's customers may have detrimentally relied on BHE's communications and, thus what regulatory actions, if any, should be taken against the Company as a result.

E. Accounting Order

Since we have ordered the Company to continue to provide eligible space-heat customers with service at prices below core tariffed rates, we believe it is now appropriate to discontinue the revenue imputation begun in Docket No. 93-701, and to grant an accounting order authorizing the Company to defer the difference between the amount imputed to the Company for space-heat revenues in Docket No. 97-596 and the amount expected to be received under a space-heat rate of 5.4¢ along with the newly established breakpoint of 700 kWh for residential customers. The revenue impact of these changes will be based on the rate year level sales projected in Docket No. 97-596 adjusted by an elasticity factor of -.5. This elasticity level falls within the mid-range of the short-term elasticity studies⁷ surveyed by the Company's witnesses and is more in line with those studies used and relied on by the Company in its rate case sales projections. In calculating the amount to be deferred the price changes used

⁷Since, for accounting order purposes, we are attempting to measure the short-term impact of the price change, we believe it is more appropriate to use a short-term elasticity rate rather than a long-term rate.

to calculate the changes in demand should only be those changes which occur as a result of this Order.⁸

F. No-Interest Loan Program

As part of the Order which initially authorized the residential space-heat program, we required the Company under certain circumstances to provide no-interest loans for the financing of fuel conversions to residential customers who newly installed electric space-heat after the start of the Company's program. Docket No. 95-701, *supra.*, Order at 6. These loans would be available if, within six years of the start of the program, the ratio of 12-month average electric heat prices divided by the 12-month average of #2 heating oil prices increases by more than 40%.

Within 30 days of the date of this Order, the Company should submit its analysis as to whether any space-heat customers will be eligible for this program, based on the space-heat rate it intends to charge this winter.

Accordingly, it is

ORDERED

- 1. That Bangor Hydro-Electric Company shall continue to offer a space-heat discount rate;
- 2. That the space-heat rate for residential and commercial classes shall be no higher than 5.4ϕ /kWh;
- 3. That the non-heat/space-heat breakpoint for residential customers shall be no higher than 700 kWh/month, and for non-separately metered commercial customers shall be no higher than 1200 kWh/month;
- 4. That BHE's request for an Accounting Order is granted, and the Company is authorized to defer the difference between the amounts anticipated to be collected based on the maximum space-heat rates established by this Order, using an elasticity factor of -.5, and the revenue imputed to the Company in Docket No. 97-596;
- 5. That the Company shall submit its calculation of the amount to be deferred pursuant to this Accounting Order within thirty (30) days of this Order;
- 6. That BHE is authorized to offer discount rates below the space-heat rate as described in this Order; and

⁸We recognize that if the Company charges a T&D rate of 4.0¢/kWh or less for the current heating season, as we strongly urge, it is likely to continue to experience something of a revenue shortfall. For the same reasons that led us to urge the 4.0¢ ceiling for this winter, we do not believe that this produces an unfair result.

7. That Company should submit its analysis of whether any of its customers are eligible for the no-interest loan program ordered in Docket No. 95-701 and its plan to implement such a program, if there are eligible customers, within 30 days of the date of this Order.

Dated at Augusta, Maine, this 14th day of November, 2000.

BY ORDER OF THE COMMISSION

Dennis L. Keschl Administrative Director

COMMISSIONERS VOTING FOR: Welch

Nugent Diamond

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

- 1. <u>Reconsideration</u> of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.
- 2. <u>Appeal of a final decision</u> of the Commission may be taken to the Law Court by filing, within 30 days of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Civil Procedure, Rule 73, et seq.
- 3. <u>Additional court review</u> of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

<u>Note</u>: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.

APPENDIX A

By way of a letter dated May 16, 2000, BHE informed the Commission that it expected to make a filing next month regarding its space heating rate for residential and commercial customers. The Company indicated in its letter that it had retained the consulting services of The NorthBridge Group of Lincoln, Massachusetts to assist it in reviewing its space heating rate. So that all stakeholders could be aware of the Commission's position on electric space heating prior to the beginning of the winter heating season, the Company requested that all issues involving the space heating rate be resolved by October 1, 2000.

In an attempt to accommodate this request, a Notice of Proceeding, which provided interested persons with an opportunity to intervene, was issued on May 31, 2000, prior to the time of the Company actually filing its case. The OPA filed a timely petition to intervene which was granted without objection. A late-filed petition was submitted by Central Maine Power Company. Following discussions with counsel for BHE, CMP withdrew its petition and instead requested that it be added to the service list in this case as an "Interested Party with Documents."

The Company filed its direct case consisting of the pre-filed testimony of John Weber and Erin McNeill on June 30, 2000. A technical conference was held on August 1, 2000. On August 22, 2000, Ron Norton, on behalf of the OPA, filed responsive testimony in this matter. A technical conference on the OPA's case was held on August 24, 2000.

Pre-trial memos which identified the documents the parties intended to introduce, as well as the expected rebuttal and surrebuttal testimonies, were submitted by BHE and the OPA on September 14, 2000. In their memos the parties indicated that they had agreed to enter all data responses, as well as the transcripts from the technical conferences, into the record in this proceeding.

A pre-trial conference was held on September 18, 2000 and hearings were held as scheduled on September 21, 2000. At such time, Company witnesses Weber/O'Neill and Carroll Lee gave oral rebuttal testimony and were subject to cross-examination. Dr. Norton provided surrebuttal and was also cross-examined at such time.

On September 28, 2000, the Company and the OPA submitted their briefs in this matter. On October 2, 2000, Donna Robinson, a customer of BHE, filed a petition to intervene. The Company filed an objection to Ms. Robinson's petition on October 16, 2000. The Examiner overruled the objection and granted Ms. Robinson's petition with the condition that she would "take the case as she found it" and, therefore, her participation would be limited to exceptions to the Examiner's Report and any other post-decision rights that might be available to parties.

By way of a Procedural Order dated October 5, 2000, the following documents were formally admitted into the record:

Document	Exhibit No.
Advisory Staff Set 1	Exam. No. 1
OPA Set 1	Exam. No. 2
ODR Set 1	Exam. No. 3
ODR Set 2	Exam. No. 4
Tech. Conf. Trans. (8/1/00)	Exam. No. 5
Tech. Conf. Trans. (8/29/00)	Exam. No. 6

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	BHE Comments, Docket No. 95-701 BHE response to ODR 3-1	Exam. No. 7 Exam. No. 8
	O'Neill/Weber Data Responses ODR 1-4 (numbered)	OPA No. 1 OPA No. 2
	Prefiled Testimony of Weber/O'Neill Prefiled Testimony of Ronald Norton	

On October 12, 2000, the Examiner issued his report in this matter. To allow parties an opportunity to present exceptions to the Report, oral argument was held on October 18, 2000.